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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,030	05/28/2002	Michael Jon Gustafson	758.1012USWO	4536

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EXAMINER

JENKINS, JERMAINE L

ART UNIT	PAPER NUMBER
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2855

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/031,030	Applicant(s) GUSTAFSON ET AL.	
	Examiner Jermaine Jenkins	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-34 and 36-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-34, 36-45, 47 and 50-54 is/are rejected.
- 7) ☒ Claim(s) 46, 48, 49 and 55-58 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Objections

1. Claims 35 & 37 are objected to because of the following informalities: Claim 35 is missing or misnumbered (See claim 36). Claim 37 is an improper dependent claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 26-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Joyce (GB 2,247,316A).

In regards to claim 26, Joyce teaches a pressure sensor having a housing defining a cavity (11, being interpreted as a pressure chamber), a member (16, being interpreted as a diaphragm) dividing the cavity (11) into a first and second pressure chambers (17 & 18, being interpreted as upper and lower sub-chambers) (Page 2, lines 28-31), at least a portion of the member (16) being movable within the cavity (11) and along an axis (Page 4, lines 16-19), a magnet (23) operably

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connected to the member (16) (Page 3, lines 11-12), the magnet (23) generating a magnetic field; and a hall-effect sensor (27) having a surface and outputting a voltage in response to the magnetic field exerting a force through the surface of the hall-effect sensor (27) (Page 3, lines 25-Page 4, line 6), the surface being parallel to the axis (See Figure 1).

With respect to claim 27, Joyce teaches the magnet (23) being positioned within the cavity (11) (See Figure 1).

With respect to claim 28, Joyce teaches the magnet (23) being connected directly to the member (16) (Page 3, lines 11-12; See Figure 1).

With respect to claim 29, Joyce teaches the member (16) being formed with the magnet (23) (Page 3, lines 11-12; See Figure 1).

With respect to claim 30, Joyce teaches the member (16) being slidably positioned within the cavity (11) (See Figure 1).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 32, 34, 36-42, 44, 45 & 50-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joyce (GB 2,247,316A) in view of Washeleski et al (6,396,259).

With respect to claims 32, 34, 36, 37, 44 & 53 Joyce teaches the claimed invention except for the hall-sensor being programmable. Washeleski et al teaches a hall-effect sensor (50) is programmable (Column 1, lines 50-61 & Column 5, lines 53-67).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a programmable hall-effect sensor as taught by Washeleski et al in the pressure sensor of Joyce for the purpose of allowing for substantially wide, part-to-part magnetic component variations such that the slope, amplitude and offset of the magnetic transfer function need not be repeatable (Washeleski et al, Column 6, lines 9-14).

With respect to claim 38, Joyce teaches the magnet (23) generating a magnetic field; and a hall-effect sensor (27) having a surface and outputting a voltage in response to the magnetic field exerting a force through the surface of the hall-effect sensor (27) (Page 3, lines 25-Page 4, line 6), the surface being parallel to the axis (See Figure 1).

With respect to claim 39, Joyce teaches the magnet (23) being positioned within the cavity (11) (See Figure 1).

With respect to claim 40, Joyce teaches the magnet (23) being connected directly to the member (16) (Page 3, lines 11-12; See Figure 1).

With respect to claim 41, Joyce teaches the member (16) being formed with the magnet (23) (Page 3, lines 11-12; See Figure 1).

With respect to claim 42, Joyce teaches the member (16) being slidably positioned within the cavity (11) (See Figure 1).

With respect to claims 45 & 50, Joyce teaches the hall effect sensor has a discrete output and a continuous output (Page 3, lines 25-Page 4, line 6).

With respect to claims 51, 52 & 54, Joyce teaches a circuit electrical communication with the hall-effect sensor, the hall-effect sensor and at least a portion of the circuit being molded into a single unit (See Figure 1).

6. Claims 31 & 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joyce (GB 2,247,316A) in view of Silverwater (4,651,670).

With respect to claims 31 & 33, Joyce teaches the claimed invention except for the member being a piston, the piston including a sleeve and the magnet is at least partially positioned within the sleeve, a filter housing defining a filter chamber, a filter positioned within the filter chamber, a filter having a first and second portions, the first portion being in fluid communication with the first pressure chamber, and the second portion being in fluid communication with the second pressure chamber.

Silverwater teaches a pressure indicating device wherein the member is a piston (204) including a sleeve (276, being read as a slide) and the magnet (276) is at least partially within the sleeve (276) (Column 9, lines 53-65), a filter housing defining a filter chamber; a filter (116) positioned within the filter chamber, the filter having first and second portions, the first position being in fluid communication with the first pressure chamber, and the second portion being in fluid communication with the second pressure chamber (Column 3, lines 59-63; Column 6, lines 43-47). It would have been obvious to one having ordinary skill in the art at the time the invention was made manufacture the member to a piston including a sleeve as taught by Silverwater into the pressure sensing apparatus of Joyce for the purpose of being capable of indicating at least two differences in pressure and therefore being more versatile and convenient (Silverwater, Column 2, lines 21-25).

7. Claims 43 & 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joyce (GB 2,247,316A) and Washeleski et al (6,396,259) as applied to claims 32, 34, 36-42 & 44 above, and further in view of Silverwater (4,651,670).

With respect to claims 43 & 47, Joyce and Washeleski et al teaches the claimed invention except for the member being a piston, the piston including a sleeve and the magnet is at least partially positioned within the sleeve, a filter housing defining a filter chamber, a filter positioned within the filter chamber, a filter having a first and second portions, the first portion being in fluid communication with the first pressure chamber, and the second portion being in fluid communication with the second pressure chamber.

Silverwater teaches a pressure indicating device wherein the member is a piston (204) including a sleeve (276, being read as a slide) and the magnet (276) is at least partially within the sleeve (276) (Column 9, lines 53-65), a filter housing defining a filter chamber; a filter (116) positioned within the filter chamber, the filter having first and second portions, the first position being in fluid communication with the first pressure chamber, and the second portion being in fluid communication with the second pressure chamber (Column 3, lines 59-63; Column 6, lines 43-47). It would have been obvious to one having ordinary skill in the art at the time the invention was made manufacture the member to a piston including a sleeve as taught by Silverwater into the pressure sensing apparatus of Joyce and Washeleksi et al for the purpose of being capable of indicating at least two differences in pressure and therefore being more versatile and convenient (Silverwater, Column 2, lines 21-25).

Allowable Subject Matter

8. Claims 46, 48, 49 & 55-58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermaine Jenkins whose telephone number is 571-272-2179. The examiner can normally be reached on Monday-Friday 8am-430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jermaine Jenkins
A.U. 2855



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